REMARKS

Claims 1-26 and 28 are pending in this application. Claims 1-18, 20-26 and 28 are rejected. Claim 19 is allowed. No new matter has been added. It is respectfully submitted that the pending claims define allowable subject matter.

Applicant acknowledges with appreciation the allowance of claim 19.

Claims 1, 2, 4, 5, 7, 15-18 and 20-22 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yonezawa et al. (U.S. Patent Application Publication 2003/0211827), hereafter Yonezawa, in view of Dunne et al. (U.S. Patent 6,745,036), hereafter Dunne, and further in view of Yarkosky (U.S. Patent 6,895,218). Applicant respectfully traverses this rejection.

Yonezawa and Yarkosky are described and discussed in Applicant's previously filed responses filed on November 13, 2006 and March 29, 2007. The Office has now included the Dunne reference in this Section 103 rejection. Dunne is directed to a location beacon system wherein the location of portable terminals is determined based on the power level of a received signal at location beacons (abstract). A plurality of radio fixed parts (RFPs) 2 are networked together for communication and one or more portable parts (PPs) 5 are configured to communicate with the RFPs 2 (Dunne, column 4, lines 27-47). The RFPs 2 (using beacons 6) identify PPs 5 based on transmitted information indicating the presence of a PP 5 in the range of an RFP 2 (Dunne, column 5, lines 20-31). Dunne then notes that the "received power level of the transmitted identity information that is received by a particular beacon 6 will depend on many factors such as transmission power level, antenna gain of the transmitter, interference, operating terrain and the question of whether a line-of-sight view is established between a given PP 5 transmitting the identity information and a given beacon 6." (Dunne, column 5, lines 31-38). A threshold is set and whether a PP 5 is determined to be within the range of a beacon 6 is based on the received signal strength from a PP 5 being above or below the threshold (Dunne, column 5, lines 46-65).

Claim 1 recites a communication system including, among other elements, a second communication module to "transmit the second type of communication signal inside the building

to a third communication module at a power level based on a signal-to-interference level." Thus, the communication signal is transmitted at a power level based on a signal-to-interference level. The Office relies on Dunne at column 5, lines 39-65, column 7, lines 65-67 and column 11, lines 15-20 for allegedly disclosing this feature (See Office Action, page 4).

Applicant respectfully submits that Dunne does not teach transmitting "the second type of communication signal inside the building to a third communication module at a power level based on a signal-to-interference level." Rather, Dunne merely notes that signal strength is affected by many different factors (as described above) and then states that "for the purpose of the present description, references to received power level are intended to mean the power level available for reception by an antenna, and in particular the power level available for reception by beacon antennas." (Dunne, column 5, lines 41-45). Thus, Dunne is clarifying that the determination of whether a PP is in the range of a beacon 6 is based on the power level of a received signal as affected by the different factors. However, the transmitted power level in Dunne is not changed based on any signal-to-interference level, but instead, a received power (which may be affected by interference) is compared to a threshold to determine whether a PP is within range of a beacon. The transmission power level of the PPs in Dunne is simply not adjusted based on any of these factors. Accordingly, Applicant submits that the combination of Yonezawa with Dunne and Yarkosky does not teach a system as recited in independent claim 1.

Claims 2, 4, 5, 7, 15-18 and 20-22 depend from independent claim 1. When the recitations of claims 2, 4, 5, 7, 15-18 and 20-22 are considered in combination with the recitations of claim 1, Applicant submits that dependent claims 2, 4, 5, 7, 15-18 and 20-22 are likewise patentable over the combination of Yonezawa with Dunne and Yarkosky for at least the same reasons set forth above.

Claims 3 and 12 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yonezawa et al. in view of Dunne and Yarkosky and further in view of Iwata et al. (U.S. Patent Application Publication 2004/0137842 A1). Applicant respectfully traverses this rejection.

Claims 3 and 12 depend from independent claim 1 and are allowable based at least on the dependency of these claims from claim 1. Further, even from a cursory reading of the Iwata et al. reference, this reference fails to make up for the deficiencies of the Yonezawa et al, Dunne and Yarkosky references as discussed in more detail above.

Claim 6 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yonezawa et al. in view of Dunne and Yarkosky and further in view of Takatori et al. (U.S. Patent 6,421,027 B1). Applicant respectfully traverses this rejection.

Claim 6 depends from independent claim 1 and is allowable based at least on the dependency of this claim from claim 1. Further, even from a cursory reading of the Takatori et al. reference, this reference fails to make up for the deficiencies of the Yonezawa et al, Dunne and Yarkosky references as discussed in more detail above.

Claims 8 and 9 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yonezawa et al. in view of Dunne and Yarkosky and further in view of Judd et al. (U.S. Patent Application Publication 2002/0177401). Applicant respectfully traverses this rejection.

Claims 8 and 9 depend from independent claim 1 and are allowable based at least on the dependency of these claims from claim 1. Further, even from a cursory reading of the Judd et al. reference, this reference fails to make up for the deficiencies of the Yonezawa et al, Dunne and Yarkosky references as discussed in more detail above.

Claims 10, 11 and 14 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yonezawa et al. in view of Dunne and Yarkosky and further in view of Masoian (U.S. Patent Application Publication 2001/0031623). Applicant respectfully traverses this rejection.

Claims 10, 11 and 14 depend from independent claim 1 and are allowable based at least on the dependency of these claims from claim 1. Further, even from a cursory reading of the Masoian reference, this reference fails to make up for the deficiencies of the Yonezawa et al, Dunne and Yarkosky references as discussed in more detail above.

Claim 13 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yonezawa et al. in view of Dunne and Yarkosky and further in view of Iwata et al. and Haemmig et al. (U.S. Patent 3,876,980). Applicant respectfully traverses this rejection.

Claim 13 depends from independent claim 1 and is allowable based at least on the dependency of this claim from claim 1. Further, even from a cursory reading of the Iwata et al. and Haemmig et al. references, these references fail to make up for the deficiencies of the Yonezawa et al, Dunne and Yarkosky references as discussed in more detail above.

Claim 23 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ami et al. (Japanese Publication No. 2004056457), hereafter Ami, in view of Yarkosky. Applicant respectfully traverses this rejection.

Claim 23 recites an apparatus comprising "a communication module mountable to the side of a building" and the communication module is configured to "receive a radio signal from another communication module located on the side of the building, the radio signal originating from an elevation different than the communication module and propagated at least one of substantially upward and substantially downward along an outside surface of the building" and "transmit the radio signal into the building." The combination of Ami and Yarkosky fails to teach an apparatus as recited in claim 23.

Ami, as described in the Patent Abstract and translation provided with the Office Action, is directed to a wireless transmission system wherein an antenna 31, 32, or 33 installed on the roof of an apartment 20 receives a broadcast signal and provides the signal to a millimeter wave transmitter 22 (Ami, paragraph 0021). The system includes a plurality of receive sections 23, for example, on each floor of the apartment 20. A reflector 51 is provided for each apartment unit and includes a reflecting metal plate 52 and an anchoring section 53 for attaching to a veranda 21 for the apartment units (Ami, paragraph 0025). Signals communicated from the transmitter 22 on the roof of the apartment 20 are emitted downward and redirected or bent with the reflector at each floor of the apartment 20 to direct the signal into each of the apartment units (Ami, paragraph 0026). The signal (i.e., electric wave of a millimeter wave band) is thus "incorporated through a receive section 23 *indoor* [of a tenant 40]. The millimeter wave transmitter 41 which reradiates indoors the millimeter wave electrification wave received in the receive section 23 is installed in indoor [of a tenant 40]." (Ami, paragraph 0022, emphasis added). The signal is then received by a receiving set 42 and displayed, for example, on a television (Ami, paragraph 0022).

The Office Action asserts that Ami describes a system having two communication modules located on the side of a building (namely transmitter 22 and receiver 23) such that a radio signal is propagated substantially downward along an outside surface of the building. Applicant respectfully disagrees. The receiver 23 of Ami is not located on the side of the building, but instead indoors inside the building. The reflector 51 of Ami is located outside the

building to reflect the signal from the transmitter 22 on top of the building to the receive section 23 inside the building. Thus, no communication module is provided as recited in claim 23 that is configured to "receive a radio signal from another communication module located on the side of the building, the radio signal originating from an elevation different than the communication module and propagated at least one of substantially upward and substantially downward along an outside surface of the building" and "transmit the radio signal into the building." The signal from the roof transmitter 22 of Ami is reflected into the building by the reflector 51 and not received by a communication module outside the building that then transmits the radio signal into the building as recited in claim 23. Accordingly, Applicant submits that the combination of Ami and Yarkosky does not teach an apparatus as recited in independent claim 23.

Claim 24 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ami in view of Yarkosky and further in view of Takatori. Applicant respectfully traverses this rejection.

Claim 24 depends from independent claim 23 and is allowable based at least on the dependency of this claim from claim 23. Further, even from a cursory reading of the Takatori reference, this reference fails to make up for the deficiencies of the Ami and Yarkosky references as discussed in more detail above.

Claim 25 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over O'Neill in view of Carter. Applicant respectfully traverses this rejection.

O'Neill and Carter are described and discussed in more detail above and in Applicant's previous responses filed on November 13, 2006 and March 29, 2007.

Claim 25 recites a method comprising "receiving a radio signal at a communication module, wherein the communication module is mounted to the side of a building, wherein the radio signal originated from an elevation different than the communication module and the signal is encoded with an indication of the elevation from which the signal was transmitted." The Office asserts with respect to claim 25 that "Carter also discloses the use of unique id codes in a building for tracking location of portable transceivers (see pars 5-6, and 52-53), therefore Carter discloses applicant's limitation above." (Office Action, page 2). Applicant respectfully disagrees. First, nothing in Carter teaches that the unique ID provides any information about the elevation from which the signal was transmitted, much less that the elevation information is

encoded in the signal. Second, the unique IDs are provided to identify the mounted beacons 32 in the system, not the moving transceivers 30 that are being detected. Lastly, the location of a transceiver is determined based on a pair of beacons that detect a transceiver. Specifically, a corresponding location or locations in a signal strength table are identified based on the received signal strength at the pair of beacons (Carter, paragraph 0052 and 0053). Thus, the location of the transceiver is based on a lookup table of signal strengths and not based on any type of encoded indication of the elevation as recited in claim 25. Accordingly, Applicant submits that this description in Carter in fact teaches away from encoding an elevation indication into the transmitted signal as location is already determined based on received signal strength. Accordingly, Applicant submits that the combination of O'Neill and Carter does not teach a method as recited in independent claim 25.

Claims 26 and 28 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over O'Neill and Carter in view of Yarkosky and Takatori. Applicant respectfully traverses this rejection.

Claims 26 and 28 depend from independent claim 25 and are allowable based at least on the dependency of these claims from claim 25. Further, even from a cursory reading of the Yarkosky and Takatori references, these references fail to make up for the deficiencies of the O'Neill and Carter references as discussed in more detail above.

Finally, claim 25 has also been rejected under 35 U.S.C. § 103(a) as being unpatentable over O'Neill in view of Trent (U.S. Patent 3,665,313). Applicant respectfully traverses this rejection.

Trent is directed to a location identification system having a plurality of ground transmitters that encode a continuous tone signal at specified intervals with the binary code uniquely identifying the location of the transmitter. A receiver, which may be in a flying aircraft, receives the signal and a decoder decodes the binary code. A display then displays a unique decimal code identifying the location of the transmitter based on the decoded signal (Trent, column 2, lines 10-32). Nothing in Trent describes a signal that "is encoded with an indication of the elevation from which the signal was transmitted." The encoded signal of Trent indicates the ground location of the transmitter, not the elevation from which the signal was transmitted. Nothing in Trent describes indicating the elevation at which the signal was

transmitted. Accordingly, Applicant submits that the combination of O'Neill and Trent does not teach a method as recited in independent claim 25.

In view of the foregoing remarks, it is respectfully submitted that the prior art neither anticipates nor renders obvious the claimed invention and the pending claims in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited. Should anything remain in order to place the present application in condition for allowance, the Examiner is kindly invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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